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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sung-Kyung Jang

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EXAMINER

PHUONG, DAI

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/715,421	Applicant(s) JANG, SUNG-KYUNG	
	Examiner Dai A. Phuong	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-19,21-24,26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-19, 21-24 and 26-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, filed 05/04/2007, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 2, 20 and 25 have been canceled and claims 26-27 have been added. Claims 1, 3-19, 21-24 and 26-27 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-8 and 10-19 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charriere et al. (U.S. 6944178) in view of Koo et al. (Pub. No: 20020071407).

Regarding claim 1, Charriere et al. disclose a radio data transmission method comprising: receiving information corresponding to a data amount of a buffer and a characteristic of data to be transmitted from a plurality of logical channels (fig. 4, col. 2, line 17 to col. 3, line 11); and selecting data to transmit from one of the plurality of channels based at least on the data characteristic of each channel (fig. 4, col. 2, line 17 to col. 3, line 11). However, Charriere et al. least on the data characteristic of each channel, wherein the data characteristic used to select data from one of the channel represents whether re-transmission data exists for a specific logical channel.

In the same field of endeavor, Koo et al. disclose the data characteristic used to select data from one of the channel represents whether re-transmission data exists for a specific logical channel ([0128] to [0129]).

4. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile telecommunication system of Charriere et al. by specifically including the data characteristic used to select data from one of the channel represents whether re-transmission data exists for a specific logical channel, as taught by Koo et al., the motivation being in order to provide a packet data retransmission method for increasing throughput of a downlink and reducing a processing delay time, using a retransmission channel different from a channel used during initial transmission, in a HARQ scheme.

Regarding claim 4, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 1. Further, Charriere et al. disclose the method further comprising sending the information from each of the logical channels to a transport channel (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 5, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 4. Further, Charriere et al. disclose the method wherein sending the information comprises sending a MAC_STATUS_RESP Primitive (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 6, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 5. Further, Charriere et al. disclose the method wherein the

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MAC_STATUS_RESP Primitive includes information of the data characteristic (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 7, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 6. Further, Charriere et al. disclose the method wherein said MAC_STATUS_RESP Primitive further includes information representing an amount of re-transmission data (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 8, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 10, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 1. Further, Charriere et al. disclose the method wherein selecting data is based on whether re-transmission data exist rather than by a priority of the logical channel (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 11, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 12, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 11. Further, Charriere et al. disclose the method further comprising sending information from each of the logical channels to a transport channel, and the selecting of the data is performed by the transport channel (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 13, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 7.

Regarding claim 16, the combination of Charriere et al. and Koo et al. all the limitations in claim 11. Further, Charriere et al. disclose the method further comprising prioritizing a first

logical channel having re-transmission data with a higher priority than a second logical channel without re-transmission data, and transmitting data of the first logical channel prior to transmitting data of the second logical channel (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 17, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 11. Further, Charriere et al. disclose the method wherein the selecting of data of the specific logical channel is performed based on priorities of corresponding logical channels if a plurality of logical channels include re-transmission data (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 18, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 11. Further, Charriere et al. disclose the method wherein the selection of the specific logical channel is performed based on priorities of each logical channel if logical channels do not include re-transmission data (fig. 4, col. 3, line 31 to col. 5, line 62).

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 23, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 24, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 26, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 1. Further, Koo et al. disclose the method wherein the re-transmission data corresponds to data that was previously partially sent to a transport channel ([0128] to [0139]).

Regarding claim 27, the combination of Charriere et al. and Koo et al. disclose all the limitations in claim 1. Further, Koo et al. disclose the method wherein the re-transmission data represents data previously sent with data loss ([0128] to [0139]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charriere et al. (U.S. 6944178) in view of Herrmann et al. (Pub. No: 20020085531).

Regarding claim 3, Charriere et al. disclose all the limitations in claim 2. However, Charriere et al. do not disclose the method wherein the data characteristic comprises one of a True indication representing that the re-transmission data exists and a False indication representing that the re-transmission data does not exist.

In the same field of endeavor, Herrmann et al. disclose the method wherein the data characteristic comprises one of a True indication representing that the re-transmission data exists and a False indication representing that the re-transmission data does not exist ([0067] to [0089]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile telecommunication system of Charriere et al. by specifically including disclose the method wherein the data characteristic comprises one of a

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True indication representing that the re-transmission data exists and a False indication representing that the re-transmission data does not exist, as taught by Herrmann et al., the motivation being in order to provide for transmitting useful data over logic channels which have different priorities, which are mapped onto exactly one transport channel and provide a wireless network which indicates a selection process for finding a suitable transport format combination which then determines the transmission of transport blocks.

Regarding claim 9, this claim is rejected for the same reason as set forth in claim 3.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

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Date: 07/18/2007



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